

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-13. canceled.

14. (currently amended): A method of measuring the textural similarity of images, the method comprising.

automatically determining a statistical dissimilarity ($d(i, j)$) between the images (i, j);

and

~~determining a textural dissimilarity ($D(i, j)$) using said statistical dissimilarity~~

~~($d(i, j)$);~~

~~characterised by~~ automatically determining a perceptual dissimilarity ($\hat{d} | P^{(i)} - P^{(j)} |$)

between the images; and

automatically determining a the influence of said statistical dissimilarity ($d(i, j)$), on the
textural dissimilarity ($D(i, j)$), without input from a user, based on the statistical dissimilarity

($d(i, j)$) and, being dependent on a function of the perceptual dissimilarity ($\hat{d} | P^{(i)} - P^{(j)} |$)

where \hat{d} is a function whose value is dependant on a range and magnitude of the perceptual
dissimilarity.

15. (previously presented): A method according to claim 14, wherein determining the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) comprises:

determining quantitative measurements ($P^{(i)}, P^{(j)}$) of the textural regularity of the respective images (i, j); and

determining the difference between said quantitative measurements ($P^{(i)}, P^{(j)}$).

16. (previously presented): A method according to claim 14, wherein the textural dissimilarity ($D(i, j)$) is a value proportional to the statistical dissimilarity ($d(i, j)$) when the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) is not larger than a predetermined threshold.

17. (currently amended): A method according to claim 14 wherein the degree of influence of the statistical dissimilarity on the textural dissimilarity ($D(i, j)$) is determined in dependence based on the magnitude of the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) when the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) is greater than a predetermined threshold.

18. (previously presented): A method according to claim 14, wherein the textural dissimilarity $D(i, j)$ is determined according to the equation $D(i, j) = d(i, j) + \alpha \hat{d}(i, j)^{\alpha \hat{d}(P^{(i)}, P^{(j)})}$ where α is a predetermined scaling factor and \hat{d} is a function defined as:

$$\hat{d}(P^{(i)}, P^{(j)}) = \begin{cases} 0 & \left| P^{(i)} - P^{(j)} \right| \leq 1 \\ \left| P^{(i)} - P^{(j)} \right| & \left| P^{(i)} - P^{(j)} \right| > 1 \end{cases}$$

19. (currently amended): A computer-readable recording medium storing a computer program for executing a method of measuring the textural similarity of images, wherein the method comprises:

automatically determining a statistical dissimilarity ($d(i, j)$), between the images (i, j);

and

~~determining a textural dissimilarity ($D(i, j)$) using said statistical dissimilarity~~

~~($d(i, j)$),~~

automatically characterised by determining a perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$)

between the images and

~~the influence of said statistical dissimilarity ($d(i, j)$), on the~~

automatically determining a textural dissimilarity ($D(i, j)$), without input from the user,

based on the statistical dissimilarity ($d(i, j)$) and being dependent on a function of the perceptual

dissimilarity ($\hat{d}(|P^{(i)} - P^{(j)}|)$) where \hat{d} is a function whose value is dependant on a range and

magnitude of the perceptual dissimilarity.

20. (previously presented): A computer-readable recording medium according to claim 19, wherein the method comprises determining said textural dissimilarity $D(i, j)$ in accordance

with the equation $D(i, j) = d(i, j) + d(i, j)^{\alpha d(P^{(i)}, P^{(j)})}$, where α is a predetermined scaling factor and the function d is defined as:

$$\hat{d}(P^{(i)}, P^{(j)}) = \begin{cases} 0 & \left| \frac{P^{(i)} - P^{(j)}}{P^{(i)} - P^{(j)}} \right| \leq 1 \\ \left| \frac{P^{(i)} - P^{(j)}}{P^{(i)} - P^{(j)}} \right| & \left| \frac{P^{(i)} - P^{(j)}}{P^{(i)} - P^{(j)}} \right| > 1 \end{cases}$$

21. (currently amended): An apparatus for measuring the textural similarity of images, the apparatus comprising:

means for automatically determining a statistical dissimilarity ($d(i, j)$) between the images (i, j); and

~~means for determining a textural dissimilarity ($D(i, j)$) using said statistical dissimilarity ($d(i, j)$);~~

~~characterised by means for~~ automatically determining a textural dissimilarity ($D(i, j)$) perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$), without input from a user, based on the statistical dissimilarity ($d(i, j)$) and between the images and the means for determining the textural dissimilarity ($D(i, j)$) being operable to control the influence of said statistical dissimilarity ($d(i, j)$) on the textural dissimilarity ($D(i, j)$) in dependence on a function of the perceptual dissimilarity ($\hat{d}(|P^{(i)} - P^{(j)}|)$) where \hat{d} is a function whose value is dependant on a range and magnitude of the perceptual dissimilarity.

22. (previously presented): An apparatus according to claim 21, wherein the means for determining the perceptual dissimilarity ($d(|P^{(i)} - P^{(j)}|)$) comprises:

means for determining quantitative measurements ($P^{(i)}, P^{(j)}$) of the textural regularity of the respective images (i, j); and

means for determining the difference between said quantitative measurements ($P^{(i)}, P^{(j)}$).

23. (previously presented): An apparatus according to claim 21, wherein the means for determining the textural dissimilarity ($D(i, j)$) is configured to determine the textural dissimilarity ($D(i, j)$) as a value proportional to the statistical dissimilarity ($d(i, j)$) when the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) is not larger than a predetermined threshold.

24. (previously presented): An apparatus according to claim 21, wherein the means for determining the textural dissimilarity ($D(i, j)$) is configured to control the degree of influence of the statistical dissimilarity on the textural dissimilarity ($D(i, j)$) in dependence on the magnitude of the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) when the perceptual dissimilarity ($|P^{(i)} - P^{(j)}|$) is greater than a predetermined threshold.

25. (previously presented): An apparatus according to claim 21, wherein the means for determining the textural dissimilarity $D(i, j)$ is configured to determine the textural dissimilarity

$D(i, j)$ according to the equation $D(i, j) = d(i, j) + \alpha \hat{d}(P^{(i)}, P^{(j)})$, where α is a predetermined scaling factor and \hat{d} is a function defined as:

$$\hat{d}(P^{(i)}, P^{(j)}) = \begin{cases} 0 & \left| P^{(i)} - P^{(j)} \right| \leq 1 \\ \left| P^{(i)} - P^{(j)} \right| & \left| P^{(i)} - P^{(j)} \right| > 1 \end{cases}.$$